

- 21 -

Claims

1. Road safety barrier, of a symmetric or asymmetric kind, characterized in that it comprises a resistant element (A) to stop the motion of heavy vehicles, including two substantially vertical walls, and a dampening element (B), forming a socle at the foot of said resistant element (A), on one side or on both sides facing the carriageway; said dampening element (B) being made of a material which deforms itself upon the impact caused by an automobile, and being inserted in a seat of the resistant element (A) and/or rigidly connected to the latter, and said dampening element (B) having additionally a form which facilitates the lifting of the front part of the automobile.

2. Road safety barrier according to claim 1, wherein the at least one dampening element (B) is formed by a continuous sheet steel with open cross-section (4, 4', 4", 17) fixed on its upper part to the resistant element (A), and contacting on its lower part the substantially vertical wall of the resistant element (A) or else being spaced apart from said wall.

3. Road safety barrier according to claim 1, characterized in that the dampening element (B) is formed by a continuous socle (18, 18') made of plastics, which is internally stiffened by means of a reticular

- 22 -

structure, or septa (19), or a honeycomb structure, or the like.

4. Road safety barrier according to claim 1, wherein the  
5 dampening element (B) is formed by a continuous socle  
(13, 21, 21', 21'') of plastics, which is internally  
completely hollow and may be filled (21, 21', 21'') with  
water and an antifreeze or salt.

10 5. Road safety barrier according to claim 1,  
characterized in that the dampening socle (B) is formed  
by a continuous blade or strip having the shape of a  
double or triple wave or the like, of a kind usually  
employed for the realization of a guardrail comprising a  
15 strip and posts, and wherein said strip is supported by  
and connected with bolts to steel supports (15), which  
are fitted at equal distances inside seats or front  
recesses of the resistant element (A), the said supports  
having a desired inclination in order to facilitate the  
20 ascent or lifting of the front portion of the  
automobile.

25 6. Road safety barrier according to claims 3 or 4,  
characterized in that the connection with the resistant  
element may be performed by means of a restrained joint  
(6', 20), by means of continuous or discontinuous strips  
(23') extending below the resistant element (A), or  
above it (23''), or through (23) the resistant element

- 23 -

(A), or by a combination of these systems.

7. Road safety barrier according to any of the preceding claims, wherein the resistant element (A) is anchored to  
5 its support by means of ductile screw anchors.

8. Road safety barrier according to claim 7, wherein between the resistant element (A) and its support, there are disposed friction reducing shoes.

10 ~~9. Road safety barrier according to claim 7 or 8,~~  
wherein the reinforcement of the resistant element (A), made of concrete, has an additional bracket (37) engaging two hooks (35, 35') which are connected or  
15 welded on a lower steel-made plate (31, 31') of the resistant element (A), said plate being crossed by the ductile screw anchors (29) for the anchoring thereof to the curbstone or pavement.

20 10. Road safety barrier according to any of the preceding claims, wherein the upper part of the barrier supports a screen (24) which may be a sound dampening screen, a net for the protection against the throw of objects, a screen for the protection from gusts, and  
25 the rear part of said resistant element (A) being provided with cavities (26) for mounting sound absorbers (25).

- 24 -

11. Road safety barrier of a symmetric or an asymmetric kind, characterized in that it comprises a continuous resistant element (A) extending upwards starting from the road pavement, to stop the motion of heavy vehicles, with two substantially vertical walls, and a dampening element (B) which forms a continuous socle at the foot of said resistant element (A), on one or both sides of said resistant element (A) facing the carriageway; said dampening element (B) being made of concrete (10, 10') and a continuous or discontinuous layer of a dampening material (11), or a plurality of concentrated dissipators (12) like springs, dissipating bundles of entangled steel fibers, or the like, being introduced between the dampening element (B) made of concrete (10, 10') and said resistant element (A).
12. Road safety barrier according to claim 11, wherein the dampening material (11) is polystyrene.
13. Road safety barrier according to claim 11. wherein the dampening element made of concrete (10') is simply laid on the curbstone or pavement, without being connected to the resistant element (A).
14. Road safety barrier according to claim 11, wherein the dampening element (10) is connected to the resistant element (A), for example by means of bolts, which however permit the translation of the dampening element

- 25 -

longitudinal extension of the barrier.

*Int A 32*  
5 ~~15. Road safety barrier according to any of the claims 11 to 14, wherein the resistant element (A) supports a screen (3, 24) or a handrail (1, 2).~~

16. Road safety barrier according to claim 11, wherein said resistant element (A) is anchored to the curbstone or pavement by means of ductile anchor means (29).

10

*Int A 47*  
~~17. Road safety barrier according to claims 11 and 16, wherein friction reducing shoes are disposed below the dampening element (B).~~

15

18. Road safety barrier according to claim 1 or 11, wherein the barrier formed by the resistant element (A) and the dampening element (B), has an overall shape which substantially corresponds to the shape of a New Jersey barrier.

20

19. Road safety barrier according to claim 1 or 11, wherein the resistant element (A) is provided with rear cavities (26) for the insertion of noise absorbers (25) of a known kind, which serve to selectively absorb

25 ~~medium/low frequencies.~~

*Int A 6 on separate page of the claims*  
*Add A 57*  
AMENDED SHEET  
*2/2/21*